

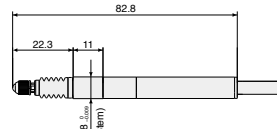
DK DK805S

Resolution **0.1 μm** Resolution **0.5 μm** Stem **φ8** Stroke **5mm** Output **A/B phase**

* DK805SAR/DK805SAR5/DK805SBR/DK805SBR5

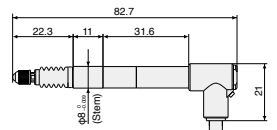


DK805SAR/DK805SAR5
DK805SBR/DK805SBR5



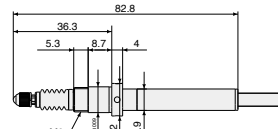
* Upon installation, clamp the stem.

DK805SALR/DK805SALR5
DK805SBLR/DK805SBLR5

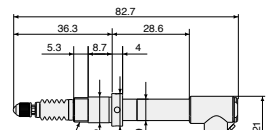


* Upon installation, clamp the stem.

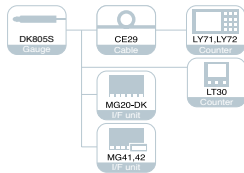
DK805SAFR/DK805SAFR5
DK805SBFR/DK805SBFR5



DK805SAFLR/DK805SAFLR5
DK805SBFLR/DK805SBFLR5



Unit: mm



Specifications

Model	High-resolution models		General-purpose resolution models	
	DK805SAR, DK805SAR5 DK805SAFR, DK805SAFLR	DK805SBR, DK805SBLR DK805SBFR, DK805SBFLR	DK805SAR5, DK805SAR5 DK805SAFR5, DK805SAFLR5	DK805SBR5, DK805SBLR5 DK805SBFR5, DK805SBFLR5
Measuring range	5 mm			
Maximum resolution	0.1 μm		0.5 μm	
Accuracy (at 20°C/68°F)	1 μm		1.5 μm	
Measuring force (at 20°C/68°F)	Upward: 0.35±0.25 N Horizontal: 0.40±0.25 N Downward: 0.45±0.25 N			
Maximum response speed	80 m/min	42 m/min	250 m/min	100 m/min
Reference point	Position at spindle movement of 1mm			
Reference-point response speed	Same as the noted maximum response speed			
Output	A/B/reference point Voltage-differential line driver output (conforming to EIA-422)			
Spindle drive system	Spring push	Vacuum suction (DK805SALR/SAFLR/SBLR/SBFLR/SALR5/SAFLR5/SBLR5/SBFLR5)		
Number of cycles tested*	60 million			
Protection grade*	Straight model: IP66, right-angle model: IP64 (IP67*)			
Vibration resistance	20 to 2000 Hz 100 m/s ²			
Impact resistance	1000 m/s ² 11 ms			
Operating temperature	0 to 50 °C			
Storage temperature	-20 to 60 °C			
Power supply	5 VDC±5%			
Power consumption	1 W			
Mass*	Approx. 30 g			
Output cable length	2.4 m		2.4 m	
Feeler	Carbide ball tip, Mounting screw M2.5		Steel ball tip, Mounting screw M2.5	
Accessories	Instruction Manual, +P M4 × 5 screw (2pc), tightening nut, clamp spanner, wave washer, mounting pin 1 each (DK8**S***) Hose elbow 1 pc (DK8**S***) only, one spanner			

*1 Under specific test conditions defined by Magnescale Co., Ltd. *2 Excluding the interpolation box and connector
*3 When φ4 mm tube is connected for right-angle model *4 Excluding cable section and interpolation box

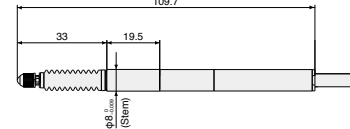
DK DK812S

Resolution **0.1 μm** Resolution **0.5 μm** Stem **φ8** Stroke **12mm** Output **A/B phase**

* DK812SAR/DK812SAR5/DK812SBR/DK812SBR5

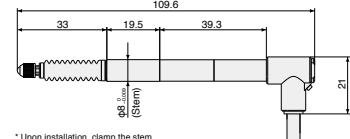


DK812SAR/DK812SAR5
DK812SBR/DK812SBR5

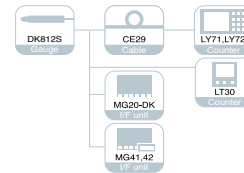


* Upon installation, clamp the stem.

DK812SALR/DK812SALR5
DK812SBLR/DK812SBLR5



* Upon installation, clamp the stem.



Specifications

Model	High-resolution models		General-purpose resolution models	
	DK812SAR, DK812SAR5 DK812SAFR, DK812SAFLR DK812SAVR	DK812SBR, DK812SBLR DK812SBFR, DK812SBFLR DK812SBR5	DK812SAR5, DK812SAR5 DK812SAFR5, DK812SAFLR5 DK812SAVR5	DK812SBR5, DK812SBLR5 DK812SBFR5, DK812SBFLR5 DK812SBR5
Measuring range	12 mm		12 mm	
Maximum resolution	0.1 μm		0.5 μm	
Accuracy (at 20°C/68°F)	1 μm		1.5 μm	
Measuring force (at 20°C/68°F)	Upward: 0.4±0.3 N Horizontal: 0.5±0.3 N Downward: 0.6±0.3 N		0.6±0.5 N (Pneumatic push type) 0.7±0.5 N (Pneumatic push type) 0.8±0.5 N (Pneumatic push type)	
Maximum response speed	80 m/min	42 m/min	250 m/min	100 m/min
Reference point	Position at spindle movement of 1mm			
Reference-point response speed	Same as the noted maximum response speed			
Output	A/B/reference point Voltage-differential line driver output (conforming to EIA-422)			
Spindle drive system	Spring push	Pneumatic push (DK812SAVR/SBVR/SAVR5/SBVR5)	Vacuum suction (DK812SALR/SAFLR/SBLR/SBFLR/SALR5/SAFLR5/SBLR5/SBFLR5)	
Number of strokes*	60 million			
Protection grade*	Straight model: IP66, right-angle model: IP64 (IP67*)			
Vibration resistance	20 to 2000 Hz 100 m/s ²			
Impact resistance	1000 m/s ² 11 ms			
Operating temperature	0 to 50 °C			
Storage temperature	-20 to 60 °C			
Power supply	5 VDC±5%			
Power consumption	1 W			
Mass*	Approx. 30 g			
Output cable length	2.4 m		2.4 m	
Feeler	Carbide ball tip, Mounting screw M2.5		Steel ball tip, Mounting screw M2.5	
Accessories	Instruction Manual, +P M4 × 5 screw (2pc), tightening nut, clamp spanner, wave washer, mounting pin 1 each (DK8**S***) Hose elbow 1 pc (DK8**S***) only, one spanner			

*1 Under specific test conditions defined by Magnescale Co., Ltd. Pneumatic push Model: 30 million times *2 Excluding the interpolation box and connector
*3 When φ4 mm tube is connected for right-angle model *4 Excluding cable section and interpolation box